



上海源叶生物科技有限公司  
 Shanghai yuanye Bio-Technology Co., Ltd  
 电话: 021-61312973 传真: 021-55068248  
 网址: www.shyuanye.com  
 邮箱: shyysw@sina.com

产品名称: **Hoechst 33258 analog**  
 产品别名: **Hoechst 33258 analog**

生物活性:					
<b>Description</b>	<p>Hoechst 33258 analog are part of a family of blue fluorescent dyes used to stain DNA. IC50 Value: Target: These Bis-benzimides were originally developed by Hoechst AG, which numbered all their compounds so that the dye Hoechst 33342 is the 33342nd compound made by the company. There are three related Hoechst stains: Hoechst 33258, Hoechst 33342, and Hoechst 34580. The dyes Hoechst 33258 and Hoechst 33342 are the ones most commonly used and they have similar excitation/emission spectra. Both dyes are excited by ultraviolet light at around 350 nm, and both emit blue/cyan fluorescent light around an emission maximum at 461 nm. Unbound dye has its maximum fluorescence emission in the 510-540 nm range. Hoechst dyes are soluble in water and in organic solvents such as dimethyl formamide or dimethyl sulfoxide. Concentrations can be achieved of up to 10 mg/mL. Aqueous solutions are stable at 2-6 ° C for at least six months when protected from light. For long-term storage the solutions are instead frozen at ≤ -20 ° C. The dyes bind to the minor groove of double-stranded DNA with a preference for sequences rich in adenine and thymine. Although the dyes can bind to all nucleic acids, AT-rich double-stranded DNA strands enhance fluorescence considerably. Hoechst dyes are cell-permeable and can bind to DNA in live or fixed cells. Therefore, these stains are often called supravital, which means that cells survive a treatment with these compounds. Cells that express specific ATP-binding cassette transporter proteins can also actively transport these stains out of their cytoplasm.</p>				
<b>Solvent&amp;Solubility</b>	<p><b>In Vitro:</b>  <b>DMSO : ≥ 51 mg/mL (99.88 mM)</b>            * "≥" means soluble, but saturation unknown.</p>				
		Solvent Concentration	Mass Concentration		
	<b>Preparing</b>		<b>1 mg</b>	<b>5 mg</b>	<b>10 mg</b>
	<b>Stock Solutions</b>	1 mM	1.9585 mL	9.7926 mL	19.5852 mL
	5 mM	0.3917 mL	1.9585 mL	3.9170 mL	
	10 mM	0.1959 mL	0.9793 mL	1.9585 mL	
<p>*请根据产品在不同溶剂中的溶解度选择合适的溶剂配制储备液, 一旦配成溶液, 请分装保存, 避免反复冻融造成的产品失效。            储备液的保存方式和期限: -80°C, 6 months; -20°C, 1 month (protect from light)。-80°C 储存时, 请在 6 个月内使用, -20°C 储存时, 请在 1 个月内使用。</p>					
<b>References</b>	<p>[1]. a b c "Hoechst Stains". Invitrogen (Molecular Probes).            [2]. Latt SA, Stetten G, Juergens LA, Recent developments in the detection of deoxyribonucleic acid synthesis by 33258 Hoechst fluorescence. The journal of histochemistry and cytochemistry : official journal of the Histochemistry Society 23 (7): 493-505.            [3]. Portugal J, Waring MJ. Assignment of DNA binding sites for 4',6-diamidine-2-phenylindole and bisbenzimidazole (Hoechst 33258). A comparative footprinting study. Biochimica et Biophysica Acta 949 (2): 158-68.</p>				